[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0210; Directorate Identifier 2012-NM-053-AD; Amendment

39-17744; AD 2014-03-07]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2009-26-16 for certain The Boeing Company Model MD-11 and MD-11F airplanes. AD 2009-26-16 required inspecting to determine if wires touch the upper surface of the center upper auxiliary fuel tank, and marking the location, as necessary; inspecting all wire bundles above the center upper auxiliary fuel tank for splices and damage; inspecting for damage to the fuel vapor barrier seal and upper surface of the center upper auxiliary fuel tank; and performing corrective actions, as necessary. AD 2009-26-16 also required installing nonmetallic barrier/shield sleeving, new clamps, new attaching hardware, and a new extruded channel. This new AD requires inspections of additional center upper auxiliary fuel tank locations and corrective actions as necessary. This AD was prompted by reports that identified additional locations where inspections and corrective actions of the center upper auxiliary fuel tank are needed. We are issuing this AD to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of February 4, 2010 (74 FR 69249, December 31, 2009).

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet https://www.myboeingfleet.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2013-0210; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Samuel Lee, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: (562) 627-5262; fax: (562) 627-5210; email: samuel.lee@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2009-26-16, Amendment 39-16155 (74 FR 69249, December 31, 2009). AD 2009-26-16 applied to certain The Boeing Company Model MD-11 and MD-11F airplanes. The NPRM published in the Federal Register on March 14, 2013 (78 FR 16198). The NPRM was prompted by reports that identified additional locations where inspections and corrective actions of the center upper auxiliary fuel tank are needed. The NPRM proposed to continue to require inspecting to determine if wires touch the upper surface of the center upper auxiliary fuel tank, and marking the location, as necessary; inspecting all wire bundles above the center upper auxiliary fuel tank for splices and damage; inspecting for damage to the fuel vapor barrier seal and upper surface of the center upper auxiliary fuel tank; and performing corrective actions, as necessary. The NPRM also proposed to continue to require installing nonmetallic barrier/shield sleeving, new clamps, new attaching hardware, and a new extruded channel. The NPRM also proposed to require inspections of the center upper auxiliary fuel tank at additional locations and corrective actions as necessary. We are issuing this AD to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (78 FR 16198, March 14, 2013) and the FAA's response to each comment.

Request for Approval of Alternative Methods of Compliance (AMOCs)

FedEx requested that AMOCs previously approved for AD 2009-26-16,
Amendment 39-16155 (74 FR 69249, December 31, 2009), be approved as AMOCs for
the requirements of the NPRM (78 FR 16198, March 14, 2013). FedEx also requested

that Boeing Service Bulletin MD11-28-126, Revision 4, dated November 29, 2011, be revised to incorporate changes made by seven Boeing Information Notices, which were not FAA-approved.

We acknowledge the commenter's request. However, paragraph (k)(4) of the NPRM (78 FR 16198, March 14, 2013) already states that AMOCs approved for AD 2009-26-16, Amendment 39-16155 (74 FR 69249, December 31, 2009), are approved as AMOCs for the corresponding requirements of this AD. Also, the changes in all seven Boeing Information Notices were either incorporated or resolved in Boeing Service Bulletin MD11-28-126, Revision 2, dated November 18, 2010, except for Boeing MD11 Service Bulletin Information Notice MD11-28-126 IN 07, December 3, 2012, which was issued for information only, and therefore does not affect the requirements of this final rule. No changes have been made to this final rule in this regard.

Request to Extend Compliance Time

FedEx requested that the compliance time for the NPRM (78 FR 16198, March 14, 2013) be extended from "Within 60 months after February 4, 2010 (the effective date of AD 2009-26-16)," for the retained inspection and actions specified in paragraphs (g)(1) through (g)(5) of the NPRM to 72 months, or February 4, 2016, at a minimum. FedEx stated that work would have to be accomplished by February 4, 2015, and due to the labor intensive nature of the work, 18 to 20 months is not enough time to fit into a 'C' check time interval.

We do not agree with FedEx's request. In developing an appropriate compliance time for this action, we considered not only the degree of urgency associated with addressing the subject unsafe condition, but the manufacturer's recommendation for an appropriate compliance time, the availability of required parts, and the practical aspect of installing the required modification within an interval of time that corresponds to the typical scheduled maintenance for the

majority of affected operators. The retained inspection and corrective action were previously required by AD 2009-26-16, Amendment 39-16155 (74 FR 69249, December 31, 2009), so operators should have already completed or be scheduled to have the work completed. Under the provisions of paragraph (k) of this final rule, we may approve requests for adjustments to the compliance time if data are submitted to substantiate that such an adjustment would provide an acceptable level of safety.

Request to Revise Costs of Compliance

FedEx requested that the Costs of Compliance be revised since material costs have drastically increased. FedEx stated that Boeing Service Bulletin MD11-28-126, Revision 4, dated November 29, 2011, (which we referred to in the NPRM (78 FR 16198, March 14, 2013), as the appropriate source of service information for doing the actions) specifies a cost of \$18,139 for kit part number SB11280126-11. FedEx stated that a recent quote for this kit is \$25,904. Also, the original cost for kit SB11280126-13 was \$12,268; it is now \$17,568.

We agree with the request to revise the Costs of Compliance because current costs for kits differ greatly from when the NPRM (78 FR 16198, March 14, 2013) was issued. The retained actions from AD 2009-26-16, Amendment 39-16155 (74 FR 69249, December 31, 2009), had a parts cost of \$9,405 to \$12,201; the revised parts cost is \$15,708 to \$28,005. The parts cost for the new action was revised from \$2,863 to \$6,166. We have revised the information contained in the Costs of Compliance accordingly.

Explanation of Additional Change Made to the Costs of Compliance

We have revised this AD to revise the Costs of Compliance, which incorrectly specified inspection and installation costs for four Group 6 airplanes as new actions. We have revised the information contained in the Costs of Compliance tables by removing the row containing Group 6 airplanes accordingly.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (78 FR 16198,
 March 14, 2013) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (78 FR 16198, March 14, 2013).

Costs of Compliance

We estimate that this AD affects 125 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection/ Installation [retained actions from AD 2009-26-16, Amendment 39-16155 (74 FR 69249, December 31, 2009)]	168 to 182 work-hours X \$85 per hour = \$14,280 to \$15,470 per inspection cycle	\$15,708 to \$28,005	\$29,988 to \$43,475 per inspection cycle	\$3,748,500 to \$5,434,375 per inspection cycle
Inspection/ installation Groups 1, 2, and 5, all Configuration 2 airplanes [new action]	Up to 9 work-hours X \$85 per hour = \$765	\$6,166	Up to \$6,931	Up to \$866,375

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this AD.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
 - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2009-26-16, Amendment 39-16155 (74 FR 69249, December 31, 2009), and adding the following new AD:

2014-03-07 The Boeing Company: Amendment 39-17744; Docket No. FAA-2013-0210; Directorate Identifier 2012-NM-053-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD supersedes AD 2009-26-16, Amendment 39-16155 (74 FR 69249, December 31, 2009).

(c) Applicability

This AD applies to The Boeing Company Model MD-11 and MD-11F airplanes, certificated in any category, as identified in Boeing Service Bulletin MD11-28-126, Revision 4, dated November 29, 2011.

(d) Subject

Air Transport Association (ATA) of America Code 28, Fuel.

(e) Unsafe Condition

This AD was prompted by reports that identified additional locations where inspections and corrective actions of the center upper auxiliary fuel tank are needed. We are issuing this AD to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Inspection and Corrective Action

This paragraph restates the requirements of paragraph (g) of AD 2009-26-16, Amendment 39-16155 (74 FR 69249, December 31, 2009), with revised service information. For airplanes identified in Boeing Service Bulletin MD11-28-126, Revision 1, dated June 18, 2009: Within 60 months after February 4, 2010 (the effective date of AD 2009-26-16), do the actions specified in paragraphs (g)(1) through (g)(5) of this AD, and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Service Bulletin MD11-28-126, Revision 1, dated June 18, 2009; or Boeing Service Bulletin MD11-28-126, Revision 4, dated November 29, 2011; except as required by paragraph (j) of this AD. After the effective date of this AD, only Boeing Service Bulletin MD11-28-126, Revision 4, dated November 29, 2011, may be used. Do all applicable corrective actions before further flight.

- (1) Do a general visual inspection of the wire bundles between Stations 1238.950 and 1361.000 to determine if wires touch the upper surface of the center upper auxiliary fuel tank, and mark the location, as applicable.
- (2) Do a detailed inspection for splices and damage of all wire bundles above the center upper auxiliary fuel tank between Stations 1218.950 and 1381.000.
- (3) Do a detailed inspection for damage (burn marks) of the upper surface of the center upper auxiliary fuel tank.

- (4) Do a detailed inspection for damage (burn marks) on the fuel vapor barrier seal.
- (5) Install a nonmetallic barrier/shield sleeving, new clamps, new attaching hardware, and a new extruded channel.

(h) New Inspections and Corrective Action for Group 1, Configuration 2; Group 2, Configuration 2; and Group 5, Configuration 2 Airplanes

For airplanes in Group 1, Configuration 2; Group 2, Configuration 2; and Group 5, Configuration 2; as identified in Boeing Service Bulletin MD11-28-126, Revision 4, dated November 29, 2011: Within 60 months after the effective date of this AD, do a detailed inspection of wire bundles for splices and damage (chafing, arcing, and broken insulation) and damage (burn marks) on the upper surface of the center upper auxiliary fuel tank and fuel vapor barrier seal; install barrier/shield sleeving and clamping; and do all applicable corrective actions at the locations specified in paragraphs (h)(1) through (h)(3) of this AD, in accordance with the Accomplishment Instructions of Boeing Service Bulletin MD11-28-126, Revision 4, dated November 29, 2011, except as required by paragraph (j) of this AD. Do all applicable corrective actions before further flight.

- (1) For Group 1, Configuration 2 airplanes: between Stations 1238.950 and 1381.000, Stations 1238.950 and 1256.000, and Stations 1238.950 and 1256.800, depending on passenger or freighter configuration.
- (2) For Group 2, Configuration 2 airplanes: between Stations 1238.950 and 1275.250, and Stations 1238.950 and 1275.250, passenger configuration only.
- (3) For Group 5, Configuration 2 airplanes: between Stations 1381.000 and 1238.950.

(i) Credit for Previous Actions

- (1) This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD, using the service bulletins specified in paragraphs (i)(1)(i) or (i)(1)(ii) of this AD.
- (i) Boeing Service Bulletin MD11-28-126, Revision 2, dated November 18, 2010, which is not incorporated by reference in this AD.
- (ii) Boeing Service Bulletin MD11-28-126, Revision 3, dated June 3, 2011, which is not incorporated by reference in this AD.
- (2) This paragraph provides credit for actions required by paragraph (h) of this AD, if those actions were performed before the effective date of this AD, using Boeing Service Bulletin MD11-28-126, Revision 3, dated June 3, 2011, which is not incorporated by reference in this AD.

(j) Repair

Where Boeing Service Bulletin MD11-28-126, Revision 1, dated June 18, 2009; or Boeing Service Bulletin MD11-28-126, Revision 4, dated November 29, 2011; specifies to contact The Boeing Company for repair instructions: Before further flight, repair the auxiliary fuel tank in accordance with a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles ACO, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the Los Angeles ACO, send it to the attention of the person identified in paragraph (l) of this AD.

- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.
- (3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by Structures Authorized Representative for the Boeing Commercial Airplanes Delegation Option Authorization Organization who has been authorized by the Manager, Los Angeles ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and 14 CFR 25.571, Amendment 45, and the approval must specifically refer to this AD.
- (4) AMOCs approved for AD 2009-26-16, Amendment 39-16155(74 FR 69249, December 31, 2009), are approved as AMOCs for the corresponding requirements of this AD.

(I) Related Information

- (1) For more information about this AD, contact Samuel Lee, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: (562) 627-5262; fax: (562) 627-5210; email: samuel.lee@faa.gov.
- (2) Service information identified in this AD that is not incorporated by reference may be obtained at the addresses specified in paragraphs (m)(5) and (m)(6) of this AD.

(m) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

- (3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
 - (i) Boeing Service Bulletin MD11-28-126, Revision 4, dated November 29, 2011.
 - (ii) Reserved.
- (4) The following service information was approved for IBR on February 4, 2010, (74 FR 69249, December 31, 2009).
 - (i) Boeing Service Bulletin MD11-28-126, Revision 1, dated June 18, 2009.
 - (ii) Reserved.
- (5) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet https://www.myboeingfleet.com.
- (6) You may view this service information at FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.
- (7) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

 Issued in Renton, Washington, on January 21, 2014.

Jeffrey E. Duven, Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2014-02997 Filed 02/18/2014 at 8:45 am; Publication Date: 02/19/2014]